SEQUENCE LISTING

<110> MOECKEL, BETTINA

PFEFFERLE, WALTER

HUTHMACHER, KLAUS

RUECKERT, CHRISTIAN

KALINOWSKI, JOERN

PUEHLER, ALFRED

BINDER, MICHAEL

GREISSINGER, DIETER

THIERBACH, GEORG

<120> NUCLEOTIDE SEQUENCES WHICH CODE FOR THE METY GENE

<130> 211707US0X

<140> 09/919,932

<141> 2001-08-02

<150> DE 10043334.0

<151> 2000-09-02

<150> DE 10109690.9

<151> 2001-02-28

<150> US 60/294,252

<151> 2001-05-31

<160> <170> PatentIn version 3.1 <210> 1 <211> 1720 <212> DNA <213> Corynebacterium glutamicum <220> <221> CDS <222> (200)..(1510)<223> <400> catcctacac catttagagt ggggctagtc atacccccat aaccctagct gtacgcaatc gatttcaaat cagttggaaa aagtcaagaa aattacccga gaataaattt ataccacaca gtctattgca atagaccaag ctgttcagta gggtgcatgg gagaagaatt tcctaataaa aactcttaag gacctccaa atg cca aag tac gac aat tcc aat gct gac cag Met Pro Lys Tyr Asp Asn Ser Asn Ala Asp Gln

cag acc agc gca cga aac ctt ccg atc tac caa tcc acc gct ttc gtg

Gln Thr Ser Ala Arg Asn Leu Pro Ile Tyr Gln Ser Thr Ala Phe Val
30 35 40

ttc gac tcc gct gag cac gcc aag cag cgt ttc gca ctt gag gat cta

Phe Asp Ser Ala Glu His Ala Lys Gln Arg Phe Ala Leu Glu Asp Leu
45 50 55

tgg ggc ttt gaa acc cgc tcc att cac gca ggc cag tca gta gac gca

Trp Gly Phe Glu Thr Arg Ser Ile His Ala Gly Gln Ser Val Asp Ala

15

60

120

180

232

280

-	•																
									aac Asn								424
A I	aac Asn	cgc Arg	atc Ile	gct Ala	tcc Ser 80	ctc Leu	gaa Glu	ggt Gly	ggc Gly	gtc Val 85	cac His	gct Ala	gta Val	gcg Ala	ttc Phe 90	tcc Ser	472
									gcc Ala 100								520
	ggc Gly	gac Asp	cac His 110	atc Ile	gtc Val	acc Thr	tcc Ser	cca Pro 115	cgc Arg	ctc Leu	tac Tyr	ggt Gly	ggc Gly 120	acc Thr	gag Glu	act Thr	568
	cta Leu	ttc Phe 125	ctt Leu	atc Ile	act Thr	ctt Leu	aac Asn 130	cgc Arg	ctg Leu	ggt Gly	atc Ile	gat Asp 135	gtt Val	tcc Ser	ttc Phe	gtg Val	616
	gaa Glu 140	aac Asn	ccc Pro	gac Asp	gac Asp	cct Pro 145	gag Glu	tcc Ser	tgg Trp	cag Gln	gca Ala 150	gcc Ala	gtt Val	cag Gln	cca Pro	aac Asn 155	664
	acc Thr	aaa Lys	gca Ala	ttc Phe	ttc Phe 160	ggc Gly	gag Glu	act Thr	ttc Phe	gcc Ala 165	aac Asn	cca Pro	cag Gln	gca Ala	gac Asp 170	gtc Val	712
	ctg Leu	gat Asp	att Ile	cct Pro 175	gcg Ala	gtg Val	gct Ala	gaa Glu	gtt Val 180	gcg Ala	cac His	cgc Arg	aac Asn	agc Ser 185	gtt Val	cca Pro	760
	ctg Leu	atc Ile	atc Ile 190	gac Asp	aac Asn	acc Thr	atc Ile	gct Ala 195	acc Thr	gca Ala	gcg Ala	ctc Leu	gtg Val 200	cgc Arg	ccg Pro	ctc Leu	808
									gct Ala								856
									gtg Val								904
	gat Asp	tgg Trp	act Thr	gtc Val	gaa Glu 240	aag Lys	gat Asp	gga Gly	aag Lys	cca Pro 245	gta Val	ttc Phe	ccc Pro	tac Tyr	ttc Phe 250	gtc Val	952
	act Thr	cca Pro	gat Asp	gct Ala 255	gct Ala	tac Tyr	cac His	gga Gly	ttg Leu 260	aag Lys	tac Tyr	gca Ala	gac Asp	ctt Leu 265	ggt Gly	gca Ala	1000

	-																
		gcc Ala															1048
අ ය		acc Thr 285															1096
		ctt Leu															1144
	rgca Ala	gaa Glu															1192
		ctg Leu															1240
	aag Lys	tac Tyr	acc Thr 350	ggc Gly	tcc Ser	gtt Val	ctc Leu	acc Thr 355	ttc Phe	gag Glu	atc Ile	aag Lys	ggc Gly 360	ggc Gly	aag Lys	gat Asp	1288
	gag Glu	gct Ala 365	tgg Trp	gca Ala	ttt Phe	atc Ile	gac Asp 370	gcc Ala	ctg Leu	aag Lys	cta Leu	cac His 375	tcc Ser	aac Asn	ctt Leu	gca Ala	1336
	aac Asn 380	atc Ile	ggc Gly	gat Asp	gtt Val	cgc Arg 385	tcc Ser	ctc Leu	gtt Val	gtt Val	cac His 390	cca Pro	gca Ala	acc Thr	acc Thr	acc Thr 395	1384
	cat Ḥis	tca Ser	cag Gln	tcc Ser	gac Asp 400	gaa Glu	gct Ala	ggc Gly	ctg Leu	gca Ala 405	cgc Arg	gcg Ala	ggc Gly	gtt Val	acc Thr 410	cag Gln	1432
	tcc Ser	acc Thr	gtc Val	cgc Arg 415	ctg Leu	tcc Ser	gtt Val	ggc Gly	atc Ile 420	gag Glu	acc Thr	att Ile	gat Asp	gat Asp 425	atc Ile	atc Ile	1480
	gct Ala	ct gac ctc gaa ggc ggc ttt gct gca atc tagctttaaa tagactcacc la Asp Leu Glu Gly Gly Phe Ala Ala Ile 430 435											cc	1530			
	ccaç	ıtgct	ta a	agco	gctgg	gg tt	tttc	ctttt	tca	igact	cgt	gaga	atgo	caa a	actaç	gactag	1590
	acagagctgt ccatatacac tggacgaagt tttagtcttg tccacccaga acaggcggtt												gcggtt	1650			
	attttcatgc ccaccctcgc gccttcaggt caacttgaaa tccaagcgat cggtgatgtc													gatgtc	1710		
	tccaccgaag													1720			

<210> 2

<211> 437

<212> PRT

<213> Corynebacterium glutamicum

<400> 2

Arg Ser Ile His Ala Gly Gln Ser Val Asp Ala Gln Thr Ser Ala Arg 20 25 30

Asn Leu Pro Ile Tyr Gln Ser Thr Ala Phe Val Phe Asp Ser Ala Glu 35 40 45

His Ala Lys Gln Arg Phe Ala Leu Glu Asp Leu Gly Pro Val Tyr Ser 50 55 60

Arg Leu Thr Asn Pro Thr Val Glu Ala Leu Glu Asn Arg Ile Ala Ser 65 70 75 80

Leu Glu Gly Val His Ala Val Ala Phe Ser Ser Gly Gln Ala Ala 85 90 95

Thr Thr Asn Ala Ile Leu Asn Leu Ala Gly Ala Gly Asp His Ile Val 100 105 110

Thr Ser Pro Arg Leu Tyr Gly Gly Thr Glu Thr Leu Phe Leu Ile Thr 115 120 125

Leu Asn Arg Leu Gly Ile Asp Val Ser Phe Val Glu Asn Pro Asp Asp 130 135 140

Pro Glu Ser Trp Gln Ala Ala Val Gln Pro Asn Thr Lys Ala Phe Phe 145 150 155 160

Gly Glu Thr Phe Ala Asn Pro Gln Ala Asp Val Leu Asp Ile Pro Ala Val Ala Glu Val Ala His Arg Asn Ser Val Pro Leu Ile Ile Asp Asn Thr Ile Ala Thr Ala Ala Leu Val Arg Pro Leu Glu Leu Gly Ala Asp Val Val Val Ala Ser Leu Thr Lys Phe Tyr Thr Gly Asn Gly Ser Gly Leu Gly Gly Val Leu Ile Asp Gly Gly Lys Phe Asp Trp Thr Val Glu Lys Asp Gly Lys Pro Val Phe Pro Tyr Phe Val Thr Pro Asp Ala Ala Tyr His Gly Leu Lys Tyr Ala Asp Leu Gly Ala Pro Ala Phe Gly Leu Lys Val Arg Val Gly Leu Leu Arg Asp Thr Gly Ser Thr Leu Ser Ala Phe Asn Ala Trp Ala Ala Val Gln Gly Ile Asp Thr Leu Ser Leu Arg Leu Glu Arg His Asn Glu Asn Ala Ile Lys Val Ala Glu Phe Leu Asn Asn His Glu Lys Val Glu Lys Val Asn Phe Ala Gly Leu Lys Asp Ser Pro Trp Tyr Ala Thr Lys Glu Lys Leu Gly Leu Lys Tyr Thr Gly Ser Val Leu Thr Phe Glu Ile Lys Gly Gly Lys Asp Glu Ala Trp Ala Phe

Arg Ser Leu Val Val His Pro Ala Thr Thr His Ser Gln Ser Asp 395 400

Glu Ala Gly Leu Ala Arg Ala Gly Val Thr Gln Ser Thr Val Arg Leu 405 410 415

Ser Val Gly Ile Glu Thr Ile Asp Asp Ile Ile Ala Asp Leu Glu Gly 420 425 430

Gly Phe Ala Ala Ile 435